

AMENDMENT UNDER 37 C.F.R. § 1.111  
U. S. Application No. 09/942,043

REMARKS

Claims 1-10 are all the claims pending in the application. By the present amendment, Applicant adds new claims 11-15.

Claims 1-10 have been examined and are rejected under 35 U.S.C. § 103(a).

Claims 1, 2, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama et al. (US 4,767,927) and Verbeke (US 5,814,831). Applicant respectfully traverses this rejection for the following reasons.

Claims 1 and 6 require that the reflected stimulating rays are reflected by the end face of the optical device toward the linear area of the stimulable phosphor sheet exposed to the linear stimulating rays or to a region of the stimulable phosphor sheet more forward of the linear area.

Verbecke teaches that the reflected stimulating rays which falls upon the input face 30 of the light guide member are extinguished by the beam stop 34. *See Abstract; Col. 6, lines 32-36.*

The Examiner argues that the beam stop 34 is a region more forward. However, the present claims require that the reflected stimulating rays are reflected by the end face toward the stimulable phosphor sheet. Applicant believes the Examiner is misinterpreting or misapplying the reference. As can be seen from Figs. 2 and 3, the location of the beam stop 34 is not clear, such that the relative reflections of the claims are not a necessary result of the illustrated arrangement. For example, the reflected stimulating rays may be reflected away from the stimulable phosphor sheet. In fact, in Verbecke, the reflected stimulating rays are not reflected toward the stimulable phosphor sheet but toward the beam stop 34.

Further, in the present invention, the reflected stimulating rays are reflected by the end face toward the linear area of the stimulable phosphor sheet and are capable of being utilized for

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stimulating the stimulable phosphor sheet. Thus, the efficiency, with which the stimulating rays are utilized, is capable of being kept high. However, the teachings of Verbeke seek to extinguish the reflected light without reaching the sheet, and would prevent utilizing the returned stimulating rays for the radiation image readout as in the present invention. Therefore, Verbeke not only fails to teach each feature, but actually teaches away from this aspect of the claim.

Also, the invention according to Verbeke and the invention according to Miyagawa (mentioned below, with respect to claims 3 and 8) are directed to preventing “flare” for a radiation image read-out device in which the stimulable phosphor sheet is scanned with one light spot in the main scanning direction. In Verbeke or Miyagawa, the light reflected by the end face of the optical device is to be eliminated or turned away from the area in which the reflected stimulating light is to be detected. By contrast, according to claim 1 of the present invention, the light, which is linearly irradiated and emitted from the linear area of the stimulable phosphor sheet, is received with the line sensor. The reflected stimulating light, which is reflected by the end face toward the linear area of the stimulable phosphor sheet or toward the area in which the scan has already been carried out, does not “flare”, and the light toward the linear area can be effectively utilized. See page 14, lines 2-26, of the present application.

Since, the cited references do not teach or suggest at least the above features, Applicant submits that claims 1 and 6 are patentable over the cited references. Further, claims 2-5 and 7-10 should be patentable at least by virtue of their dependencies.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama and Verbeke as applied to claim 1, 2, 6, or 7 above, and further in view of Miyagawa (US 5,455,428).

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As discussed above, claims 3 and 8 are patentable over Ohyama and Verbeke, and Miyagawa does not make up for the deficiencies of Ohyama and Verbeke.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama and Verbeke as applied to claims 1, 2, 6, or 7 above, and further in view of Nakamura et al. (US 5,540,859).

As discussed above, claims 4 and 9 are patentable over Ohyama and Verbeke, and Nakamura does not make up for the deficiencies of Ohyama and Verbeke.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama, Verbeke, and Nakamura as applied to claim 4 or 9 above, and further in view of Arakawa et al. (US 4,571,496).

As discussed above, claims 5 and 10 are patentable over Ohyama and Verbeke, and Nakamura and Arakawa do not make up for the deficiencies of Ohyama and Verbeke.

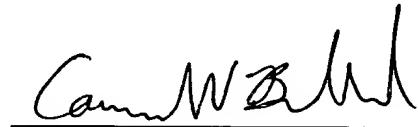
New claims 11-15 are added to provide more varied protection for the present invention. Claims 11-13 are allowable, at least because of their dependence from claim 1. Claims 14 and 15 are allowable for reasons analogous to those presented above in relation to claim 1.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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